



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/588,728	06/07/2000	Jean-Louis L'Hermet	32143-164104	8933

7590 01/29/2002

ARENT FOX KINTNER PLOTKIN7 KAHN PLLC
1050 CONNECTICUT AVENUE
SUITE 400
WASHINGTON, DC 20036-5339

EXAMINER

PRASAD, CHANDRIKA

ART UNIT PAPER NUMBER

2839

DATE MAILED: 01/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/588,728

Applicant(s)

L HERMET, JEAN-LOUIS

Examiner

Chandrika Prasad

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/7/00, 11/8/01, 1/8/02 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 08 January 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/08/01 has been entered.

Drawings

✓ 2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the land vehicle, the ship, the aircraft, the space vehicle or the ground must be shown or the feature(s) canceled from claim 59. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

✓ 3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the plurality of pair of plugs must be shown or the feature(s) canceled from claims 60-62. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

✓ 4. The drawings are objected to under 37 CFR 1.83(a) because they fail to show spring or return means as described in the specification (p15, l8). Any structural detail that is

Still open

Art Unit: 2839

essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The following is a quotation of an appropriate paragraph of 37 CFR 1.75:

(d) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See 1.58(a)).

✓ 6. Specification is objected under 37 C.F.R. 1.75(d) because connection between the cartridge and the receptacle made by a plurality of pair of plugs has not been described (see Claim 60).

7. The disclosure is objected to because of the following informalities:

- ✓ • Both numeral 70 and 200 have been used to designate a box (See Page 7, lines 2 and 13).
- ✓ • Character "M" has been used to designate shock and vibration absorption movement (P6, I21), spring back shift (P14, I11) and direction (P14, I21-22).
- ✓ • Page 14, lines 10-22 describing the temporary locking of the shift M is not understood.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- ✓ 9. Claims 60-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The independent claim 60 recites "connection between the cartridge and the receptacle is made by a plurality of pair of plugs", which is not clear.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 28-31, 34-38, 43, 51-55, 59-61, 63 and 67 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimamura et al.

Shimamura (Figures 1-14) shows a number of embodiments of a recording (reading and writing) devices having point contacts between a plug in a receptacle and a cartridge wherein the plug or the cartridge is resiliently suspended. Figures 1-5 shows a receptacle 31 with a plug with rounded contact points 32, which makes point contact with studs (contacts) D mounted in openings in the wall of a data support hard disk A mounted on a plate 12 of cartridge 10. The receptacle is suspended (elastically mounted) multidirectionally by a spring 33 in a box with a hood (not numbered). The cartridge 10 has groove at its one end, which is pivotally mounted on the plate 22 with a U-shaped portion. The cartridge has a latch portion (cam) 19, which engages the latch member 39 for engagement and disengagement. The recording device is coupled to a computer and can be mounted on ground.

As to the claims 53-55, Shimamura (Figures 8-9) shows a locking means with cams (latch portions) at the free ends and a retractable unit pivotally mounted and connected to a return spring such that it causes movement of the receptacle and the shock-absorbing unit (spring) 33.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 32 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamura et al.

Shimamura shows all the features of these claims as described in Paragraph 11 above except a plurality of plugs and cartridges. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to provide a plurality of plugs and cartridges because this would require a mere duplication of essential parts, which involves only routine skill in the art. *St. Regis Paper Co. vs. Bemis Co.* 193 USPQ 8.

14. Claims 33 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamura et al. in view of Guruswamy et al.

Shimamura shows all the features of these claims as described in Paragraph 11 above except contacts D having different shapes. Guruswamy (Figure 8) shows different shapes of contacts including flat, convex and concave shapes. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to provide a

Art Unit: 2839

concave, flat or convex shapes of the contact because these shapes provide uniform flux density as shown by Guruswamy.

15. Claims 41, 42, 65 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamura et al. in view of Alcoe et al.

Shimamura shows all the features of these claims as described in Paragraph 11 above except a protective coating of resin. Alcoe (Figure 3) shows a protective coating 43 of resins around lead portion 31. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to provide such a coating to the Shimamura contacts because this would protect and insulate the contacts.

16. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamura et al. and Rathburn.

Shimamura shows all the features of this claim as described in Paragraph 11 above except the contacts coated with gold. Rathburn (Column 6, lines 9-1) shows contacts coated with gold. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to coat the contacts with gold because this would provide a corrosion resistant metallic contact as taught by Rathburn.

17. Claims 46-50 and 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamura et al. in view of St. Germain et al.

Shimamura shows all the features of these claims as described in Paragraph 11 above except a protuberant piece on the receptacle to engage the groove on the cartridge and self-cleaning. St. Germain (Figures 1-8) shows a cylindrical protuberant part 20 engaging semi-circular grooves 18. Rubbing action during engagement of groove 18 with protuberant part as shown in Figures 8A-8L provides self-cleaning. It would have been

Art Unit: 2839

obvious to one having ordinary skill in the art at the time of the instant invention to provide these features to the Shimamura's device because this would provide a detachable engagement of the cartridge and receptacle and self-cleaning of the engaging parts as taught by St. Germain.

18. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamura et al. in view of Hashizume.

Shimamura shows all the features of this claim as described in Paragraph 11 above except a glass welding. Hashizume (Figure 1) shows glass weld 54 to secure a lens 50 to a holder 52. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to use glass welding to secure the contacts because this would provide visibility and security of the contacts.

19. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamura et al.

Shimamura shows all the features of this claim as described in Paragraph 11 above except a return force of 1 N (Newton) exerted by spring 33. Springs of various sizes and shapes providing varying forces is common knowledge and commercially available. The instant invention does not provide any reasons or problems to be solved by such a force. It would have been obvious to one having ordinary skill in the art at the time of the instant invention to select a spring to provide a force of 1 N, if so desired.

20. Claims 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamura et al. in view of Applicant's admitted prior art.

Shimamura shows all the features of these claims as described in Paragraph 11 above except a means to automatically cut off power supply. A means to automatically cut

off power supply is known as admitted by the applicant (see Page 16, line 16). It would have been obvious to one having ordinary skill in the art at the time of the instant invention to provide such a means to the Shimamura's device because this would provide a means to cut off power supply.

Contact Information

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrika Prasad at (703) 308-0977. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached at (703) 308-3119. The fax number for this Group is (703) 308/7722. Any inquiry of a general nature should be directed to the Group receptionist at (703) 308-1782.



Chandrika Prasad

January 24, 2002



**BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800**